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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,555	08/20/2001	Pak Chong Tang	US010061	6559

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EXAMINER

LUK, LAWRENCE W

ART UNIT PAPER NUMBER

2838

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n No.

09/933,555

Applicant(s)

TANG, PAK CHONG

Examiner

Lawrence Luk

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 5 is/are rejected.
- 7) ☐ Claim(s) 3, 4 and 6-8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Harlan (4,599,643).

Harlan discloses the elements as claimed. Specifically, Harlan shows an overcurrent protection circuit comprises: means for directly detecting the beam current; means for comparing the detected beam current with a predefined threshold level; and means, coupled to the control input of said high voltage generating circuit, for generating a control signal, in dependence on said comparing means, for turning off said high voltage generating circuit (refer to col.1, lines 48-61)

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harlan (4,599,643) in combination with Gurley et al. (5,043,639).

In regard to claim 2, Harlan discloses the elements as claimed, except for the control signal generating means comprises means for latching said high voltage generating circuit in an off state.

Gurley et al. shows the control signal generating means comprises means for latching said high voltage generating circuit in an off state (refer to col.5, lines 4-11).

It would have been obvious to person having ordinary skill in the art at the time of the invention made to modify the device of Harlan to include the control signal generating means comprising means for latching said high voltage generating circuit in an off state as taught by Gurley et al. for the purpose of controlling beam current flow in the kinescope.

In regard to claim 5, Harlan shows a voltage supply coupled to said high voltage generating circuit for supplying said beam current (refer to col.4, lines 18-24), and a measuring resistor in series with said voltage supply and said high voltage generating circuit, wherein a voltage across said measuring resistor is proportional to the beam current (col.13, lines 3-29).

#### ***Allowable Subject Matter***

5. Claims 3, 4 and 6-8 are objected to as being dependent upon a rejected base claim. The prior art of record fails to teach or reasonably suggest that: Claim 3, an over-current protection circuit further comprises: means for generating a reference signal equivalent to said threshold level; and temperature compensating means for making

said reference signal temperature independent, Claim 4, an over-current protection circuit further comprises: means for preventing said control signal generating means from erroneously generating said control signal due to picture tube arcing and/or random noise, Claim 6, a reference signal comprises: a voltage supply for supplying a constant voltage; a resistance divider coupled to said voltage supply; and a transistor having a base coupled to an interconnecting node of said resistance divider, a collector, coupled to said voltage supply, and an emitter for supplying said reference signal. Claim 7, said temperature compensating means comprises a series arrangement of diodes connecting said resistance divider to ground. Claim 8, control signal generating means comprises: a first transistor coupled to an output of said comparing means; a second transistor coupled to said first transistor; and a voltage source coupled to said second transistor, wherein said latching means connects said second transistor to said control input of said high voltage generating circuit, whereby when said detected beam current is greater than said predefined threshold level, said comparing means turns on said first transistor which, in turn, turns on said second transistor thereby dropping a voltage at said control input to substantially a zero voltage potential. Claims 3, 4 and 6-8 would be allowable if rewritten in independent from including all of the limitations of the base claim.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Luk whose telephone number is (703)305-0617. The examiner can normally be reached on 7 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (703) 308-1680. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-7724 for regular communications and (703)305-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1782.

LWL  
May 28, 2003

*Lawrence Luk*  
*examiner*  
*5/28/03*